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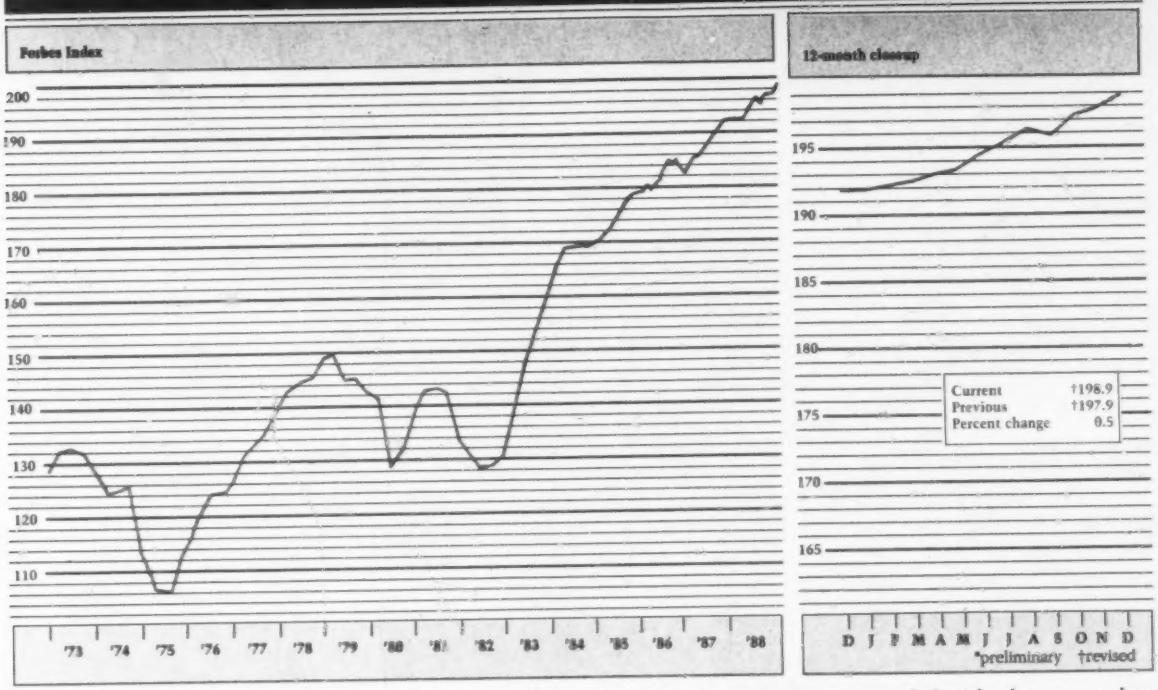
The Forbes Index



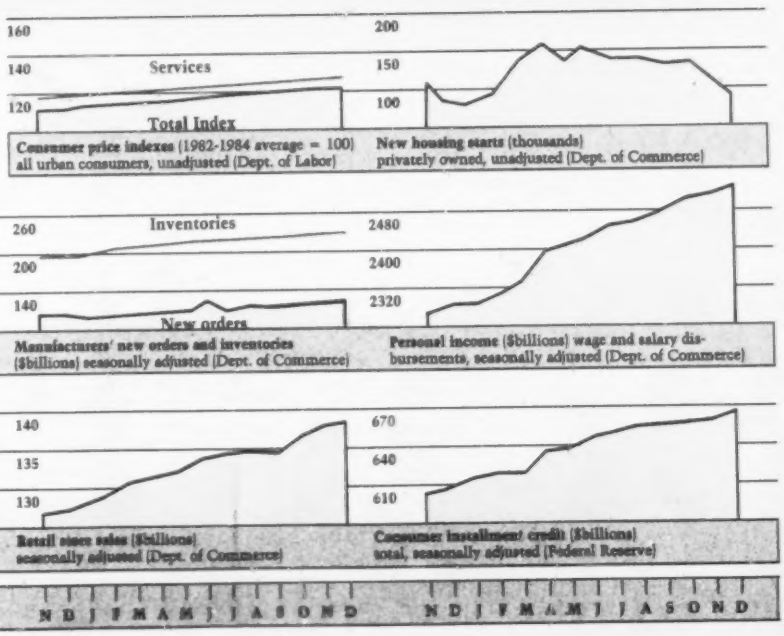
A penny earned but not saved. Growing employment levels helped push up personal income 0.6% in December, to $2.53 trillion. That's 10.9% above the December 1987 total. But a good chunk of this money will go toward paying off bills. Consumer installment credit rose 0.8% in December and 9% for all of 1988. Meanwhile, the producer price index (a measure of wholesale prices) surged 1% in January. This rise in prices, coupled with a low unemployment level (5.4%), may put additional inflationary pressure on the economy.

Manufacturers' inventories rose 0.8% in December, to $234 billion, as factory utilization reached 84.2%, the highest in over nine years. Final tabulations show the Forbes Index rose 0.5% in December and 3.5% in 1988.

The Forbes Index Components

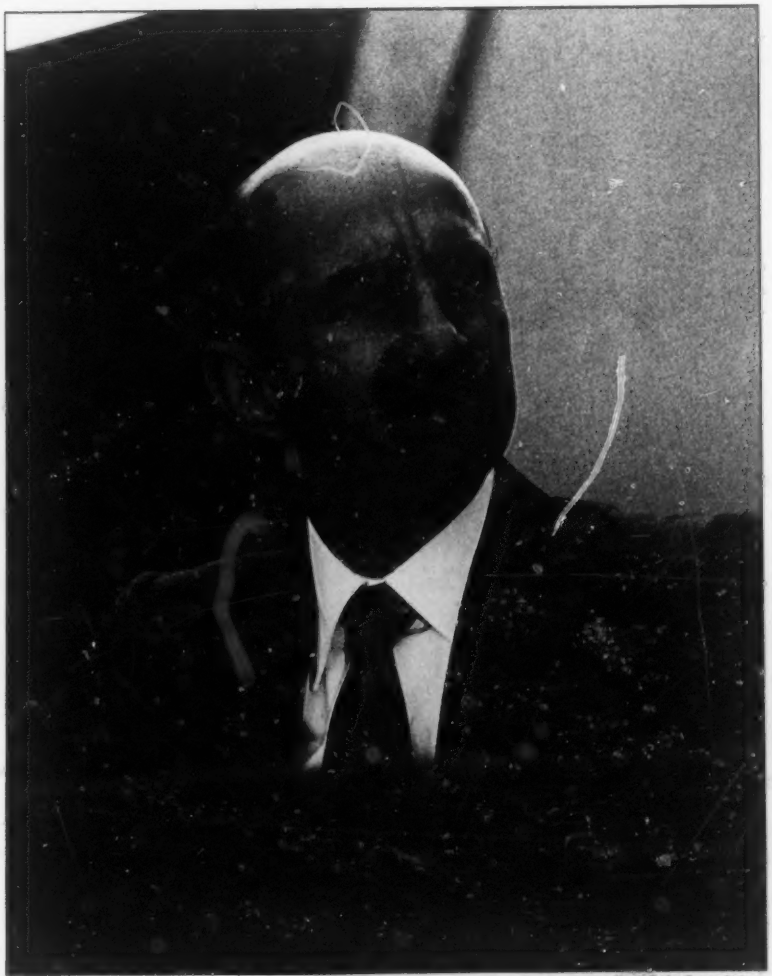
The Forbes Index is a measure of U.S. economic activity composed of eight equally weighted elements: Total industrial production, new claims for unemployment compensation, the cost of services relative to all consumer prices, the level of new orders for durable goods compared with manufacturers' inventories, total retail sales, new housing starts, personal income, total consumer installment credit.

To measure these eight elements, FORBES monitors ten series of U.S. government data. The last 14 months' data for each series are presented at right.


160
140
120
Services
Total Index
Consumer price indexes (1982-1984 average = 100) all urban consumers, unadjusted (Dept. of Labor)
200
150
100
New housing starts (thousands) privately owned, unadjusted (Dept. of Commerce)
141
138
135
Industrial production index (1967 = 100) seasonally adjusted (Federal Reserve)
260
200
140
Inventories
New orders
Manufacturers' new orders and inventories ($billions) seasonally adjusted (Dept. of Commerce)
2480
2400
2320
Personal income ($billions) wage and salary disbursements, seasonally adjusted (Dept. of Commerce)
150
250
350
Unemployment claims average for month (thousands) seasonally adjusted (Dept. of Labor)
140
135
130
Retail store sales ($billions) seasonally adjusted (Dept. of Commerce)
670
640
610
Consumer installment credit ($billions) total, seasonally adjusted (Federal Reserve)
N D J F M A M J J A S O N D
N D J F M A M J J A S O N D
N D J F M A M J J A S O N D

It looks like Washington could break the impasse on Latin debt with a generous forgiveness offer to Mexico. It's an idea that makes sense for everyone—Mexico, the U.S. and the banks.

Giving a little to save a lot



Larry Reider/Gamma-Liaison

Mexican President Carlos Salinas de Gortari
Without debt relief, how long can he continue his free-market ways?

By Edwin A. Finn Jr.

SECRETARY OF STATE James Baker wasn't just being diplomatic when he listed Mexico as a top priority in foreign policy. The U.S. Treasury is believed to be working on a plan that could cut Mexico's interest burden and debt principal by as much as 50%. Treasury officials are tight-lipped on the plan, but Mexican Finance Minister Pedro Aspe has quietly slipped into Washington several times since Bush's election in November for talks with top Treasury officials.

What's in the deal for the U.S. banks, few of whom have reserved more than 30% against their Latin American loans? Possibly guarantees. The debt that remains after a writedown could be guaranteed, by either the International Monetary Fund, the World Bank, the Inter-American Development Bank, or a new international debt agency set up with financial backing from Japan, West Germany and the U.S.

A writedown would obviously cause severe earnings pressure for some of America's largest banks. BankAmerica has a 28% reserve against loans to less developed countries. For the bank to write down its Mexican loans by 50% and maintain its reserves against developing countries at 28%, it would have to come up with an additional $545 million *(see table, opposite)*. Citicorp would have to come up with $598 million; Manufacturers Hanover, $529 million; Chemical, $522 million; Chase, $375 million; Bankers Trust, $286 million; J.P. Morgan, $290 million.

First Chicago and Security Pacific, by contrast, would require far smaller reserves. These figures don't allow for a tax benefit, which could cut the additional cash requirement.

How can the banks explain yet another earnings hit to shareholders? That's where the guarantee portion of Treasury's plan would come in. In effect, it would allow the banks to say, This is it, folks—the last time you'll ever hear bad news about Mexico from us.

The Treasury Department is unlikely to force banks to grant the writedowns. Of course, banks that don't accept won't get guarantees.

Any scaling down of the Mexican debts is no act of sentimental generosity. It is based on a realization that the fates of the U.S. and Mexico are inextricably intermingled. A starving and seething Mexico would threaten U.S. security and would send millions of refugees fleeing across our borders.

And in Washington's eyes, if any country has earned the reduction of debt, it's Mexico. The country's newly elected president, Carlos Salinas de Gortari, is committed to free-market policies and to opening the economy—as was his predecessor, Miguel de la Madrid. Even while asking for help from abroad, the Mexicans were doing a lot to help themselves. In an effort to cut inflation-producing subsidies, the Mexican government raised rates for electricity, telephone service and gasoline by as much as 90% last year.

If for Mexico, why not debt relief for other hard-pressed Latin American countries? "In Argentina and Brazil you have demagogues running for office who say they won't repay their foreign debts at all," says Harvard Professor Jeffrey Sachs, a financial adviser to several Latin American governments. "If we don't help responsible guys like President Salinas in Mexico, even our friends won't be able to stay in office."

The message to these other countries is: Do as Mexico has done. Cut government waste, liberalize your economies, join the international trading system, and then we will talk with you about debt relief.

Many Mexicans, angered by austerity, voted against the ruling party in last July's presidential elections. For the first time since coming to power in 1929, the moderate Institutional Revolutionary Party nearly lost the presidency. Salinas barely squeaked in with less than 51% of the vote. If Mexico's economic situation doesn't improve by 1993—or if the world plunges into recession—Mexico may end up with a leftist regime. That could force the U.S. to consider militarizing its southern border. What would be the effect on public opinion if U.S. forces were to turn back hungry Mexicans at bayonet point?

Sound far-fetched? Consider this recent exchange before the U.S. Senate subcommittee on international monetary affairs. Senator Phil Gramm, (R–Tex.) said he wanted the Mexicans to move even faster in enacting free-market policies. "If they did that," he said, "within a month they wouldn't need our [financial] help."

"No, but they might need our army," responded Professor Sachs.

"I'm afraid they might," said Gramm, conceding the volatility of Mexico's situation.

A delicate part of any debt-relief package would be how far Mexico would go in privatizing state-owned industries, allowing the free inflow of foreign investment and opening up to more international trade. In all this

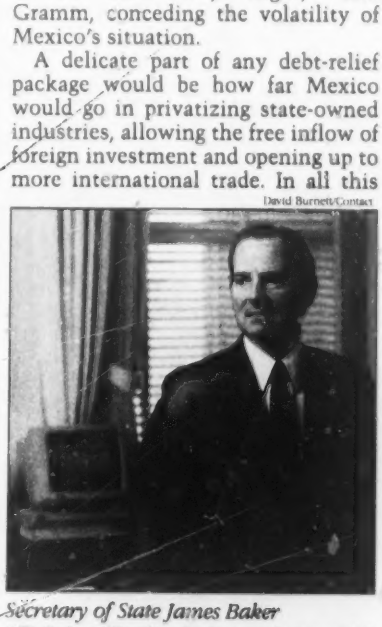
More pain?

At all but First Interstate, a 50% Mexican writeoff could cut profits.

Ten U.S. banks with largest loans to Mexico	Loans ($bil)*	Loan-loss reserves†
BankAmerica	$2.48	28%
Citicorp	2.30	24
Manufacturers Hanover	1.83	21
Chemical	1.80	21
Chase	1.50	25
Bankers Trust	1.30	28
JP Morgan	1.00	21
First Chicago	0.70	43
First Interstate	0.48	52
Security Pacific	0.35	42

*As of Sept. 30, 1988. †As a percentage of troubled loans to the Third World, as of Dec. 31, 1988.
Source: Prudential-Bache Securities.

David Burnett/Contact



Secretary of State James Baker
"Helping Mexico is in our interest."

Salinas face opposition, not from the left, but from traditio anti-American intellectuals. He i entirely a free agent—no more th a president of the U.S.

Major progress was made last as Salinas stepped into the presi cy. Mexico agreed to open its ma to more U.S. steel, beer and tex Mexico also lowered its maxir tariffs from 45% to 20%. This the U.S. and Mexico will launch to encourage foreig investme Mexico and to preve t Mexicans ripping off U.S. patents.

Under earlier regimes, Mexico tended it must make its own p ucts—everything from refrigerato batteries. But in fact such nationa has done little besides preserve a nopoly for a handful of rich Mex factory owners. As for the great of Mexico's people, this misgu nationalism has translated into prices for shoddy Mexican-m goods. But now, with tariffs lo Mexican manufacturers are h forced to keep prices down and grade the quality of their produc compete with imports from the and elsewhere.

The U.S. has more to gain throu debt-relief package than pacifyi potentially unstable neighbor the next 20 years, the U.S. could severe labor shortage. Mexico, by trast, has at least 5 million un ployed workers and will add as m as a million job seekers in each o next five years. That's 10 mil workers willing to work for $1 hour, available to add value to produced goods and services an help keep U.S. products world-c petitive. It is not important whe the Mexicans work in the U.S. U.S.-owned factories in Mexico. important thing is that a better be found to marry U.S. investm with Mexican labor.

President Carlos Salinas is a gressive thinker. Sensing which the world is going, he sends his dren to Japanese schools in Me City. If he won't always move as as Americans would like him move, we must remember that stands for policies that are benef both to his country and to ours. interest payments reduced from billion a year to $4.5 billion, exp figure that Mexico would be abl resume growth and attract back s of the capital that has fled for safety of Yankee banks.

And, besides, replacing $1 wort doubtful loans with 50 cents wort solidly guaranteed paper isn't su bad deal for the banks. ■

The Bass family has already made well over $1 billion on its investment in Walt Disney Co. Is Sid Bass ready to take profits? Not on your life. Here's why.

Creativity, with discipline

By Howard Rudnitsky

FORT WORTH BILLIONAIRE Sid Bass isn't given to discussing his investments. But last year Bass did tip his hand about his family's 18.7% stake in Walt Disney Co. Bass told Disney's chairman, Michael Eisner, that the family would keep its Disney stock until the end of this century. The implication is clear: Bass is not ready to cash in his $1.8 billion investment in Disney stock—an investment that cost around $400 million five years ago. Obviously, Sid Bass thinks Disney stock still has a long way to go up in the 1990s, even though the shares are already selling for a rather rich 19 times latest 12 months earnings.

At $10 billion, Disney's market value is already by far the largest of all the entertainment companies'—half again as large as that of second-place Warner Communications and three times as valuable as once-mighty MCA's *(see table, p. 42)*. What, then, do the Basses see on Disney's horizon that makes them want to retain their position?

They are betting that Disney's highly effective management team will continue to expand revenues from Disney's unique consumer franchise base by at least 20% a year over the next five to ten years. More, they are betting the franchise itself will grow more valuable as time passes.

In 1988 Disney's cash flow from operations—mainly from the amusement parks, resorts and filmed entertainment—exceeded $1 billion. This year, aided by major new amusement park attractions like the MGM Studio Theme Park and 12 major new movies, Disney's cash flow should be $1.3 billion (around $9.75 a share), a 21% gain over 1988. Even at today's lofty prices, Disney shares still sell for around eight times operating cash flow, its average of the last five years.

Disney's management is using this cash flow to expand the earnings base. Between 1987 and this summer Disney is spending well over $1 billion on park attractions in California and Florida. In addition Disney recently acquired a Los Angeles independent TV station (KHJ) for $320 million, and spent $160 million to buy Wrather Corp., owner of Anaheim's Disneyland Hotel. It also has opened 13 new retail stores selling such high-margin Disney products as clothing and toys, and intends to open 77 more by 1992.

That's not all. Between 1988 and 1992 the company will develope 10,000 hotel rooms, at a cost of around $1 billion. In Europe, Disney is developing, jointly with Rupert Murdoch, the Disney Channel and Sky Movies, a satellite broadcast system that will beam programming into 1 million homes in England and Ireland.

As the recent decision to boost the dividend by 20% (to 48 cents a share) suggests, Disney will have no trouble at all financing this expansion. Despite all the spending, Disney's debt load has fallen from nearly $590 million in 1987 to about $435 million—a very low 16% of total capital. Disney's cash hoard is currently nearing $1 billion, though because of heavy spending it will decline somewhat in the coming year before beginning to climb again next year.

Disney today is run by a gang of three: its boyish-looking chief executive officer, Michael Eisner, 46; President Frank Wells, a 56-year-old lawyer; and Chief Financial Officer Gary Wilson, 48.

Designers planning Disney's $2.1 billion Euro-Disneyland park
For a mere $200 million, Disney gets 49% of the equity.

The magic is back in the kingdom

A stock market laggard before the Bass family brought in new management in 1984, Disney has since become the market value leader among the four big entertainment companies.

Company	1988 revenues	Recent market capitalization ($mil)	Long-term debt[3]	EPS	Cash flow per share	Recent price	Price range 1987–89	Recent P/E	Recent price/ cash flow
Walt Disney	$3,438[1]	$10,082	$436	$3.80	$7.83	73⅜	82½–41¼	19	9
Gulf & Western	5,108[2]	5,004	1,390	3.21	2.38	41⅞	46⅜–29⅞	13	18
MCA	3,024	3,550	1,213	2.26	2.74E	48⅝	64½–30	22	18
Warner Communications	4,206	6,312	581	2.65	3.68E	39½	39½–17½	15	11

[1]Fiscal year ending 9/30/88. [2]Fiscal year ending 10/31/88. [3]As of 9/30/88, except Gulf & Western, which is as of 10/31/88. E: estimate.

If Wilson is the least known of the three, he is by no means the least important. As Eisner told Disney shareholders two years ago: "I have always believed that the creative process must be contained in what we call the 'financial box,' financial parameters that creative people can work in—but the box is tight, controlled and responsible. Gary Wilson has the key to the 'box.' "

Wilson was wooed away in 1985 from Marriott Corp. With him came two other Marriott executives, Neil McCarthy and Lawrence Murphy, both of whom now hold key strategy and planning positions at Disney.

To Wilson falls the job of financing Disney's ambitious commitments. Last year he shrewdly squeezed more money from Oriental Land Co., the Japanese company that owns the wildly successful Tokyo Disneyland (over 60 million visitors since it opened in 1983). Disney's former management failed to obtain an equity participation in the park, or even royalties on the use of Disney characters, settling for royalties ranging from 5% to 10% of park revenues.

Last April Wilson worked out a deal that will reduce Oriental Land's royalty payments but will yield $723 million in immediate cash from Oriental. This will also lessen the impact of currency swings on Disney's cash flow and earnings.

During his 11 years at Marriott, Wilson learned the value of taking in partners and asking them to put up much of the money to develop assets and future cash flows. Wilson is using the same technique at Disney.

Silver Screen Partners (FORBES, *Mar. 21, 1988*) is an example. These independently sponsored film production limited partnerships finance Disney movies on terms favorable to Disney. Silver Screen has provided about $1 billion in relatively cheap money for Disney's filmmaking.

In Disney's real estate development deals, Wilson's partnership techniques have been effective in permitting Disney to enter huge projects without burdening its balance sheet with debt. Take, for example, the two new hotels (the 758-room Swan and the 1,511-room Dolphin) and the convention center in Orlando. Wilson has lined up Tishman Realty & Construction Co., Metropolitan Life Insurance Co. and a large Japanese company, Aoki Corp., for the financing of the $375 million outlay. The properties will be run by Westin Hotels and Sheraton. For putting up its name and the raw land, Disney will receive royalties and fees on hotel and convention center revenues, which could amount to $10 million a year.

The largest project in Disney's future is, of course, its $2.1 billion Euro-Disneyland theme park. Here, too, Wilson is getting other people to put up the development money. Disney is providing only $200 million for 49% of the equity capital in the company that will operate the park, and 17.5% of a French private partnership that will own the land under the park.

The French government fought hard against Spain to win Euro-Disneyland and will lend the project about $800 million for 20 years at a fixed 7.85%. The French government is also selling the project about 4,800 acres only 20 miles outside of Paris at early 1970s agricultural values—meaning not only that the land is cheap, but that property taxes will start from a very low base. The government has even agreed to apply low value-added tax rates to the park's revenues.

Flowing from Euro-Disneyland to Disney directly will be management fees equal to 3% of revenues, plus royalties ranging from 5% to 10% of revenues, depending on the type of good or service. On overall park revenues estimated at up to $1 billion, fees and royalties could be $100 million in the first full year of operation.

While the Basses and other investors await the Euro-Disneyland payoff, Disney's Florida and California amusement theme parks are already cash machines that generated some $700 million (around $5.25 a share) in pretax cash flow last year. Park attendance was sluggish last summer, but this May a major new gated attraction will open in Orlando: the MGM-Disney Studio Theme Park, which cost $500 million. Later in the year, Typhoon Lagoon and Pleasure Island will open in Orlando, to be followed in 1990 and 1991 by several other new attractions in Florida and California.

If there is a cloud over this sunny company, it is the fear—indeed, the likelihood—that Disney's hand in film production will go from very hot to cold: Consistency in producing highly profitable films is something no one has recently achieved. Disney has held an especially hot hand the past few years. But even if the new movies falter, the old ones will still bring in huge amounts of revenue.

Eisner recently told analysts and money managers that Disney's foreign distribution, TV production and syndication, Disney Channel and home video businesses are all generating growing amounts of cash. Last year Disney's home video led the industry, with $300 million in revenues.

The Bass family bought into Disney in 1984 and shortly thereafter brought in Michael Eisner from Paramount Pictures Corp. to serve as chief executive. Shrewdly recognizing the company's hidden values, raider Saul Steinberg, with backing from Drexel Burnham, had been moving in. Steinberg took a modest amount of greenmail profits, $32 million, to go away, and the Basses rode up as white knight. In this case, the white knight decided to stay and become part of the family. For what could the Basses buy with the proceeds of their Disney stock that would be as promising an asset as the stock itself? ■

Increasingly, the U.S. not merely tolerates gambling but actively markets it. Marketing has helped make state lotteries into a $15 billion business. Have the states just scratched the surface?

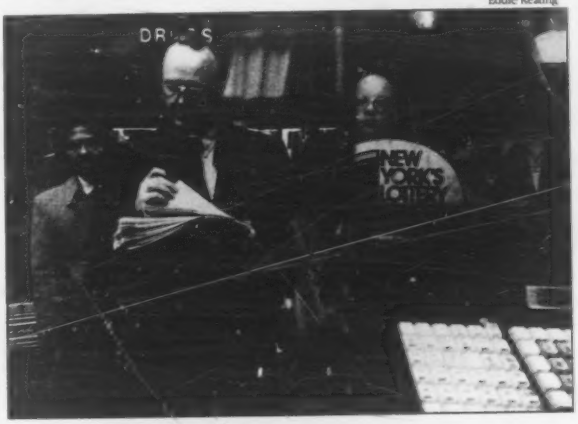
Lottomania

By James Cook

WOULD YOU PAY $1 for a shot at winning $45 million? Eighty percent of New York State's 12 million adults would and did last December when Lottomania hit the state like a fever. At one point, New York was selling 28,000 tickets a minute at some 5,600 terminals around the state. By the time the drawing finally took place on a Saturday night 37.4 million tickets had been sold in only three days.

The prize was that big because in Lotto the jackpots roll over every time nobody wins. The jackpot had started out four weeks before at $3 million and, when nobody won, moved up in stages to $17.5 million, to $26 million, and finally, under the pressure of booming sales, to $45 million. That prize, the largest in New York's history, was split 12 ways, after which the rest of New York shrugged and went about its business.

Eddie Keating



Lining up for New York's Lotto
In December, 80% of the state took a chance.

A pot that large is still an exceptional event, but mass participation in the lotteries is not. Lottomania has been gathering momentum throughout the country for nearly a decade. It's already the second-largest form of gambling in the U.S. and is rapidly overtaking the casino take in Las Vegas and Atlantic City. For the fiscal year ended June 1988, the U.S.' 29 functioning lotteries piled up $15.6 billion in sales, about as much as the U.S. primary aluminum industry did, and brought a dazzling 37% of that $15 billion down to net income, earning close to $6 billion for state governments, with no apparent pain to their taxpayers. This year the figures should be considerably higher, since state lotteries have been growing an average of 17.5% annually—roughly as fast as the computer industry.

No fewer than 28 states, the District of Columbia and two U.S. territories were in the business last year, up from 13 only a decade ago. Two of them—Virginia and Wisconsin—are just getting their lotteries under way, while the voters of four additional states—Indiana, Kentucky, Minnesota and Idaho—approved lotteries in last fall's election. That puts over 68% of the U.S. population on the bandwagon. Of the 18 states that remain, only Texas has a substantial population, and most of the rest are in the South.

"These are the old Bible Belt states," says Saul Leonard of the accounting firm of Laventhol & Horwath in Los Angeles. "You probably won't see lotteries in most of the others, at least not in the next several years—unless they find themselves desperate for funds." They may well find themselves desperate. Florida, Kentucky and Virginia have already broken ranks in the South.

In New York, the lottery's able acting director, Russell V. Gladieux, hopes to boost the lottery's sales and earnings between 50% and 75% within three years, a goal that implies at least $1 billion in profit by 1991 on a $2.3 billion sales base. If he achieves his goal, he will be something of a hero in a state that currently faces a $2.6 billion budget deficit.

There's surely room to grow. New Yorkers spend far less on the lottery per capita ($91.17 last year) than residents of neighboring Pennsylvania ($121.48), New Jersey ($152.07), Connecticut ($158.53) and Massachusetts ($234.92), the industry leader.

The days grow hot, O Babylon!

For many Americans the success of the lotteries seems yet another symptom of the long-term decay of the nation's cultural values, a softening of its moral fiber, a preference for speculation rather than for hard work. Gambling is not only accepted by the states but actually encouraged by them. But the truth is that lotteries are as American as Mom, apple pie and the American Revolution. Lotteries financed the founding of Jamestown, the Continental Army, Dartmouth, Harvard and Princeton, and public works from roads to canals. Ever since the founding of the republic, politicians have loved lotteries as a painless alternative to taxation. Or they did until a series of scandals in

the mid-1800s closed them down for a century *(see box, p. 95)*.

The modern lottery got going in the mid-Sixties when first New Hampshire and then New York voted to go into the business. The public yawned. You bought a ticket, waited weeks or months for the winning number to be drawn, and probably ran out of patience. Much as Americans liked to gamble, they did not like to wait for the results. They wanted instant gratification.

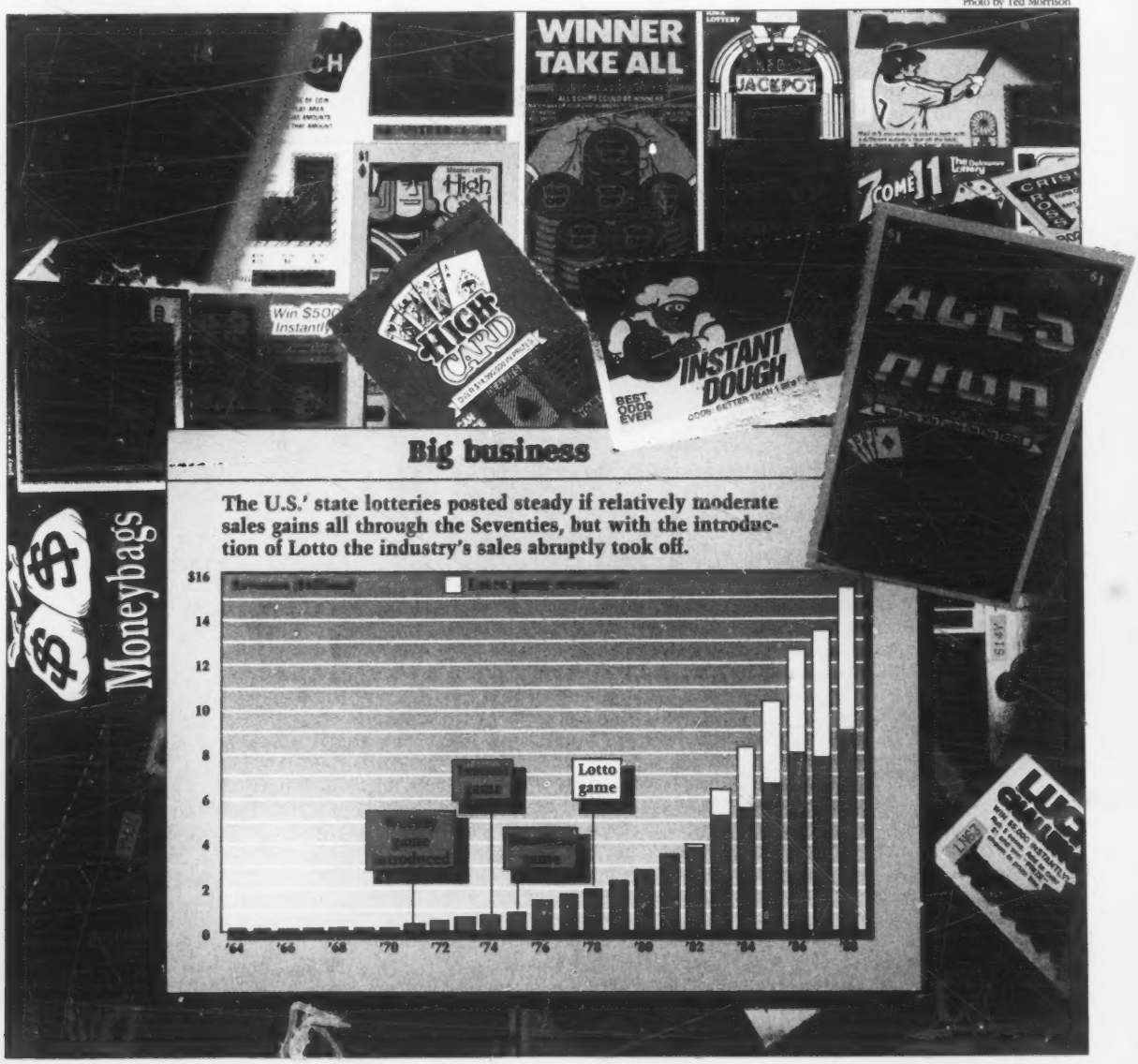
That's when modern marketing hit the lottery business. New Jersey came up first with a weekly and then a daily drawing, and a year or two later Massachusetts quickened the pace with an instant game—scratch-off tickets on which the win or loss could be determined immediately.

But what really transformed the business was the computer, which permitted high-volume, high-frequency player-active games, games in which players could pick the numbers themselves. And then in 1978 New York introduced Lotto, with its multimillion-dollar jackpots, and the game soon became a really big business. Manufacturers of instant games and computerized lottery systems got behind the politicians, and in many states—California and Oregon, for instance—they even wrote the initiatives presented to the voters.

It wasn't a hard sell. Let one state go into the business, and the state next door would follow suit sooner than lose revenues across the border. Most states committed the proceeds to specific beneficiaries and picked up some powerful support. The funds went to education, to taking care of the poor or the elderly, to assisting local communities and the arts, to funding economic development, to building parks and recreational facilities, and to almost any other worthy cause you can think of. Why not harness frivolous instincts to serve worthy causes?

Beyond the state governments and the lottery promoters, small business was another winner. The agents that sell the tickets, tens of thousands of them—some 11,000 in New York, 14,000 in Florida, over 20,000 in California—are card shops and gas stations, supermarkets and funeral parlors. As Saul Leonard calculates it, commissions average around 5.5 cents on the dollar, so last year the agents took in roughly $860 million

Photo by Ted Morrison



nationwide. That 5.5% average covers a lot of variation, depending on how much incentive the retailer needs to take on the lottery—as little as 4.1% and 5% in Massachusetts and Oregon, as much as 11.5% and 12.1% in Rhode Island and Iowa. For most of these merchants, the lottery commissions are found money and traffic-builders.

Some merchants say they carry lottery tickets only for competitive reasons: If the competition has a lottery agency, you'd better get one yourself. But where the population density is low, as it is in West Virginia, say, or South Dakota, the lottery may serve mainly to build foot traffic, and more foot traffic generally means more business, unless, as is currently happening in Florida, it creates so much lottery foot traffic the agent has trouble conducting his regular business. Winn-Dixie's 470 Florida supermarkets got out after eight months because it was costing them twice as much to service the lottery as they were getting in commissions.

After the states themselves, the most visible winners in the business, of course, are the people who supply the hardware and software to run the lotteries. That includes Bally Manufacturing's Scientific Games, British American Banknote and Webcraft, among the instant-game suppliers; Control Data's Ticketron, Gtech, General Instruments' Amtote and Syntech among the on-line terminal suppliers. Not to mention the telephone companies that provide the dedicated phone services, the courier services that deliver the instant tickets, the financial institutions that supply the prize-money annuities and the inevitable advertising and public relations firms.

For all their growth, the lotteries have not yet realized anything like their potential as money raisers. As against some $200 billion estimated to be wagered in the U.S. every year, the lotteries get only $15.6 billion. But their competition is severely limited. They do not really compete with Las Vegas and Atlantic City or with sports betting. They compete for the consumer dollar in the same sense that all leisure-time ventures do. And within their narrow range, they have something akin to a monopoly and, in fact, do not hesitate to rack up what in any other business would be called monopoly profits. On average, the lotteries pay out less than 50% of the take in prizes, versus 60% for the illegal numbers games, 80% for pari-mutuel horse racing and as much as 95% for roulette and slot machines.

In most states, the legislature specifies how some or all of the lottery funds can be spent—how much for prizes or operating expenses, or how much returned to the state—and those percentages can hobble the effective operation of the lottery.

Until the legislature finally changed the rules last fall, the Missouri lottery operated under more severe restrictions than most. It could not spend more than 10% of sales on operating expenses, had to pay out 45% in prizes and return 45% to the state, and was hampered from advertising its products. Not surprisingly, the lottery was unable to generate anything like the sales volume its promoters projected for it.

Ed Kashi

California's lottery director Chon Gutierrez
Numbers were cold, distant and impersonal.

In competing for a share of the consumer dollar, the state lotteries must use every marketing tool available. Lottery players are so unpredictable that lottery sales often fluctuate wildly. Oregon expected to net $30 million last year, but wound up with $52 million. California, on the other hand, went from $1.8 billion in 1986 to $1.4 billion in 1987 and back to $2.1 billion in 1988. Both Colorado and West Virginia last year suffered more than a 17% decline in sales.

Basically the lotteries have three products to sell: instant (scratch-off) games; numbers (pick 3 or 4); and Lotto (pick 6 for a jackpot that rolls over every time it isn't won).

That's the business. But the lottery directors can change the structure of the games—how often they are played, how many prizes are awarded and how big they are, how heavy the odds are. And they can change the name, change the theme, try to make the old appear ever new. As California's acting director Chon Gutierrez puts it: Churn out Classic Coke, New Coke, Diet Coke, caffeine-free Coke, caffeine-free and sugar-free Coke.

What works in one state doesn't always work in another. In the East, you sell through the newsstands, tobacco shops, card shops and convenience stores. In the West, through supermarkets and superstores. Instant games are a winner in New England but also-rans in places like New York and Maryland. Numbers have never caught on in the West, but on the East Coast, where people have played the illegal game for generations, they're a big and consistent winner.

California and New York hyped their Lotto sales by going from once-a-week to twice-a-week drawings, Illinois by going from twice weekly to once weekly. Massachusetts prospered by adding a second super lotto, Mass Millions, to its Megabucks game. New York cashed in by collapsing three games into two.

The trick may be simply to change. Offer something that looks new. Says Oregon's director James Davey: "We have gambling themes, we do Olympics. At Christmas we do Holiday Cash. With Lucky Stars we play on people's astrological signs. We find that if you run two or three, four or five games at the same time, you'll sell more tickets. People say, 'I'm not lucky at Lucky Stars, but I'm sure good at basketball.' "

In California, the lottery discovered some players preferred letters to numbers, so the lottery may introduce a new game, Winitials, based on letters of the alphabet. "People said that numbers were cold and distant and didn't have any personal meaning," says Gutierrez.

In New Jersey they are ordering their instant tickets with three different background colors. "People say, 'That's different,' " says the lottery's director, Barbara Marrow. " 'That must be new.' "

Some of the marketing gets pretty imaginative. In Oregon they link an instant game to a weekly television show, *The Money Game*, with a grand prize of $50,000. California has its Dreaming Campaign—you dream about what you'd do if you won. New

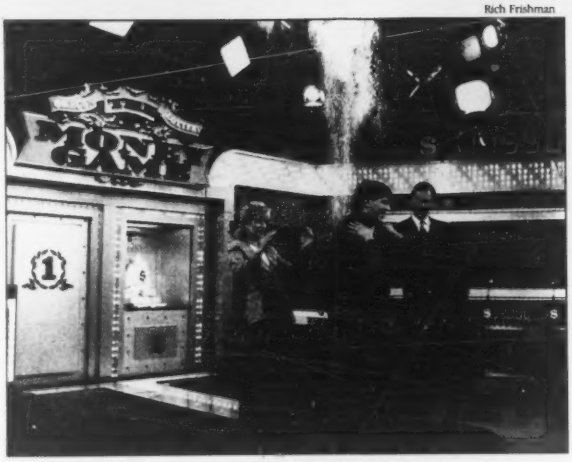
York has adopted the same theme and the slogan "All you need is a dollar and a dream."

But dreams are what the lotteries peddle. When Augustin Jombo won a $26 million New York Lotto jackpot in January, the *New York Times* headlined the story: "Lotto winner's 'American Dream' comes true."

But the ultimate marketing weapon is the size of the pot. As Massachusetts' lottery director James Hosker sees it, there are still some basics to the business—like giving your customers value for their money. "The odds don't matter," Hosker says, "but people want to see winners. We set up the prize structure so we have a lot of winners in the store. It's not a mathematical formula, it's a human relations formula."

The Hosker strategy works—instant tickets went from 50 million in 1982 to a probable 600 million this year. Massachusetts' is generally recognized as one of the best-run lotteries in the country, and it boasts the highest per capita sales in the business. One reason is that Massachusetts has been paying out more and more of the lottery's sales in prizes, as much as 60%, versus 45% only five years ago. "Why not give the customer 60% of his money back?" Hosker says. "If people like your game, they'll play it, and you get more for yourself in the long run."

Rich Frishman



The Oregon Lottery's Saturday night Money Game
Forget the odds. Winners are what matter.

Lotto carries the contradictions of the lottery to their ultimate extreme. The jackpots are huge, so huge that the less likely a player is to win, the more likely he is to play. The rewards so far exceed any conceivable cost that people who normally don't play the lottery plunk down their dollars.

But those prizes don't simply happen. They're made to happen. In the beginning at least, 20% to 25% of the possible number combinations aren't picked, so the jackpots keep rolling over, and to ensure that they do, the states have increased the odds against winning. Instead of picking 6 out of 48 numbers, New Yorkers now pick 6 out of 54, and the odds have gone from 6 million to 1 to 12.9 million to 1 for a $1 bet.

Lotto players are attracted in part by the sheer size of the potential winnings. In fact, the winnings are not quite as big as they are advertised to be. Million-dollar jackpot winners have been dismayed to discover that a $1 million jackpot means only $35,000 a year (after taxes) in 20 annual installments. Florida's $55 million jackpot winner will get only $2.7 million a year over 20 years (less after taxes). Florida simply buys an annuity that will yield $55 million over 20 years. The present value of that annuity is not $55 million but only $26 million.

New York's Russ Gladieux explains: "Say you expect to take in $4.5 million. When you take out the state's 45% share and 15% in operating expenses, and apply the current annuity factor of 2.1 to what remains, that would generate a $1.9 million jackpot." The annuity cost: just $900,000.

But if the lottery is such a pain-free moneymaker, why doesn't the federal government set up one of its own and cut down the staggering federal deficit? Because the states couldn't take the competition. "The states would lose too much," Saul Leonard says, "so I can't see the representatives from such states voting for it."

Lotteries tap some of the most primitive, mysterious and contradictory impulses in human nature. Unlike many other forms of gambling, the lottery doesn't require any skill,

Where there's a will . . .

In the 18th and 19th centuries, lotteries were both public and private enterprises, and they were a big business. In 1832, for example, Philadelphia's 200 lottery shops held over 420 drawings for prizes totaling $53 million. (That would come to something like $600 million in today's terms.) With money like that involved, the temptation was irresistible for promoters to cook up schemes to rig the draw or counterfeit the tickets or finagle the prizes or just walk off with the proceeds in their pockets.

In an 1818 case, the manager of New York's Medical Science lottery regularly fixed the draw. In one instance, the small boy who drew the tickets pulled three out of the wheel and dumped them into the lap of the manager, who promptly announced a fourth as the winner. Its owner claimed the winning number had come to him in a dream.

The bigger the business got, the worse the abuses. Bowing to pressure from the abolitionists of the time who were outraged for moral reasons, 12 states had outlawed lotteries by 1840, and the rest by 1878, except Louisiana, which finally banned them in 1894.

Thanks largely to its computer controls, the modern lottery has remained remarkably scandal free. There have been incidents, but they have been largely contained. In 1980 some Pennsylvania lottery officials fixed the game by injecting liquid latex into most of the balls used in picking the winning numbers so that the winning numbers flew up. They were caught before they collected their prizes and spent two to five years in jail. New York more recently found some employees in the lottery mail room guilty of fraud. Officials in a number of states have been accused of favoritism toward vendors, but that's unethical, not larcenous.

But nobody is complacent. Probably from the moment some Roman concocted the first lottery 2,000 years ago, another Roman began thinking of ways to cheat at it. As Massachusetts' lottery director Jim Hosker puts it, "There's some guy out there right now saying, 'How can I beat those bastards?' "—J.C.

any knowledge: Winning or losing is a matter of sheer luck. Yet though most players know their fate rests in the hands of Providence, they nonetheless cultivate the illusion that somehow they can control the outcome of the game. And so, if they don't win, they feel the fault is somehow theirs—they failed to bet their sister-in-law's anniversary or the numbers they saw on a license plate the week before through the windows of a bus.

Take Augustin Jombo, the man who won New York's $26 million lottery in January. Jombo picked his winning number—6, 14, 15, 41, 45, 51—by playing off three digits, 4, 1, 5, the month of his birth (4), the year of his birth (51), its reverse (15), its sum (6), and combinations of the three. Which tells you everything and nothing. But how else do you discipline the possibilities of the infinite?

A small industry has sprung up providing strategies for winning the lottery—dream books, winning numbers, horoscopes—and if those seem too primitive, you can turn to the more familiar witchcraft of modern technology and let Gtech's computer-controlled Quickpick find the numbers for you to bet. "Picking numbers for the Lotto game," the Iowa lottery concludes, "is an exercise in individuality that many players take seriously."

Are the lotteries making the poor noticeably poorer, taking bread out of their children's mouths, and turning responsible citizens into compulsive gamblers? The lottery's too new for the evidence to be in, but at this point the answer is, probably not. One Veterans Administration study indicated that the lottery is much less likely to lead to compulsive behavior than playing the stock market.

A young Pennsylvania couple, Tom and Philomena Drake, quit their jobs, sold everything they owned, and over a three-month period spent $15,000 on lottery tickets. It would be comforting to report that they lost their shirts. But they didn't. They came out $1,000 ahead.

The money most people put in the lottery won't break them, but it will give them pleasure and excitement and supply the government with revenue at the same time. Why be a spoilsport about it? ■

The lottery industry

The players, state by state, ranked in order of their annual revenues.

State/Year started	Total revenues* ($mil)	% change ('88–'87)	Revenues per capita	Prizes as % of total revenues	Operating exp as % of total revenues	Net income ($mil)	% of revenues to state
California/1985	$2106.4	49%	$74.78	49%	13%	$804.0	38%
New York/1967[1]	1632.0	8	91.17	47	9	725.6	44
Pennsylvania/1972	1461.0	9	121.48	50	10	592.9	40
Ohio/1974	1411.0	31	129.78	48	14	545.6	38
Massachusetts/1972	1379.2	8	234.92	59	10	434.8	31
Illinois/1974	1337.8	2	115.89	51	13	487.9	36
Michigan/1972	1246.4	19	134.02	46	15	488.4	39
New Jersey/1970	1174.0	3	152.07	49	9	500.9	42
Maryland/1973	811.4	6	174.72	48	9	352.2	43
Florida/1988[2]	658.3	—	106.36†	—	—	—	—
Connecticut/1972	513.8	5	158.53	51	10	202.70	39
Washington/1982	215.7	10	46.69	47	15	83.3	38
Virginia/1988[3]	200.0	—	100.07†	50	15	70.0	35
Arizona/1981	172.7	21	49.82	45	17	66.3	38
Oregon/1985	160.7	58	58.63	50	16	55.0	34
Missouri/1985	152.4	–15	29.65	45	11	66.6	44
Iowa/1985	129.6	36	45.73	51	18	40.2	31
Wisconsin/1988[3]	125.9	—	77.75†	51	—	—	—
Washington, D.C./1982[4]	124.5	1	200.80	49	17	42.5	34
Colorado/1983	93.3	–19	28.35	50	22	26.4	28
Kansas/1987[5]	92.0	—	36.99	44	36	19.1	20
Maine/1974	82.4	41	68.32	50	17	27.2	33
New Hampshire/1964	76.9	31	70.10	49	15	27.9	36
Rhode Island/1974	62.3	6	62.61	51	14	22.0	35
West Virginia/1986	56.6	–17	30.04	45	27	15.5	28
Delaware/1975	55.6	21	84.24	53	10	20.5	37
Vermont/1978	35.0	37	62.94	52	17	10.9	31
South Dakota/1987	26.4	—	36.92	45	25	7.8	30
Montana/1987	21.7	—	26.99	45	16	8.4	39
Total	$15.6 billion	17.48%	$93.73	48%	15%	$5.74 billion	37%

*Year ended June 30; includes other income. †Annual basis. [1]March fiscal year. [2]Jan. to June 1988. [3]Sept. to Dec. 1988. [4]September fiscal year. [5]Calendar year.

Sotheby's Art Market Trends

Index sectors	January 1989	One month ago	One year ago	Two years ago	Five years ago	One month % change	One year % change	Two years % change	Five years % change	Five years average annual % change
Old Master paintings	469	469	373	329	239	nil	+25.7	+42.6	+96.2	+14.4
19th-century European paintings	421	421	323	279	201	nil	+30.3	+50.9	+109.5	+15.9
Impressionist & Post-impressionist art	1,255	1,255	723	490	307	nil	+73.6	+156.1	+308.8	+32.5
Modern paintings (1900-1950)	1,138	1,138	757	512	282	nil	+50.3	+122.3	+303.5	+32.2
Contemporary art (1945 onward)	856	856	609	551	392	nil	+40.6	+55.4	+118.4	+16.9
American paintings (1800–pre-WWII)	1,076	1,076	871	698	556	nil	+23.5	+54.2	+93.5	+14.1
Continental ceramics	467	467	331	290	284	nil	+41.1	+61.0	+64.4	+10.5
Chinese ceramics	815	815	581	526	459	nil	+40.3	+54.9	+77.6	+12.2
English silver	388	388	381	343	219	nil	+ 1.8	+13.1	+77.2	+12.1
Continental silver	296	296	220	201	156	nil	+34.5	+47.3	+89.7	+13.7
American furniture	491	484	459	404	239	+1.4	+ 7.0	+21.5	+105.4	+15.5
French & Continental furniture	409	409	319	299	257	nil	+28.2	+36.8	+59.1	+9.7
English furniture	822	822	657	517	328	nil	+25.1	+59.0	+150.6	+20.2
Aggregate index*	740	740	514	407	286	nil	+44.0	+81.8	+158.7	+20.9

Basis: 1975 = 100 ($).

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*Contemporary art was added to the Art Index in September 1987. The aggregate index excludes this category prior to that date.

Sotheby's Art Market Trends reflect subjective analyses and opinions of Sotheby's art experts, based on auction sales and other information deemed relevant. Nothing in Sotheby's Art Market Trends is intended as investment advice or as a prediction or guarantee of future performance or otherwise.

Market highlights

In January, a relatively quiet month, New York City hosted a major series of sales of American folk art, silver, furniture and decorations, paintings and prints—Americana. American silver and porcelain were particularly strong performers. The Sam Wagstaff collection of American silver drew attention to the imaginative, stylistic range of this country's late-19th-century silver. Every piece in the collection sold, totaling $920,755.

Also in New York, approximately $28 million of Old Master paintings changed hands in a series of auctions, establishing several new artists' records. The condition of the paintings appeared to be an important factor in these Old Master sales. Buyers were willing to pay high prices only for the best-quality works in top condition, particularly for Dutch works. Italian Old Master paintings did very well. The star of the series was an allegorical painting by Giovanni de Lutero, known as Dosso Dotti. Purchased unrecognized at a country auction for $1,000, the work realized $4,070,000 when its artist was properly identified.

Minor sales of furniture in New York met presale expectations. Buyers bid competitively for items of good quality but showed little interest in items that were heavily restored or of mediocre quality.

In mid-January a series of sales of Chinese ceramics, works of art and paintings took place in Hong Kong. Among the highlights were 19 pieces of blue-and-white Ming porcelain from the collection of the late Mr. and Mrs. R.H.R. Palmer, which sold for a total of $3.5 million. Mr. Palmer had been the chairman of the British food manufacturing company Huntley & Palmer and had assembled his collection in the 1930s.

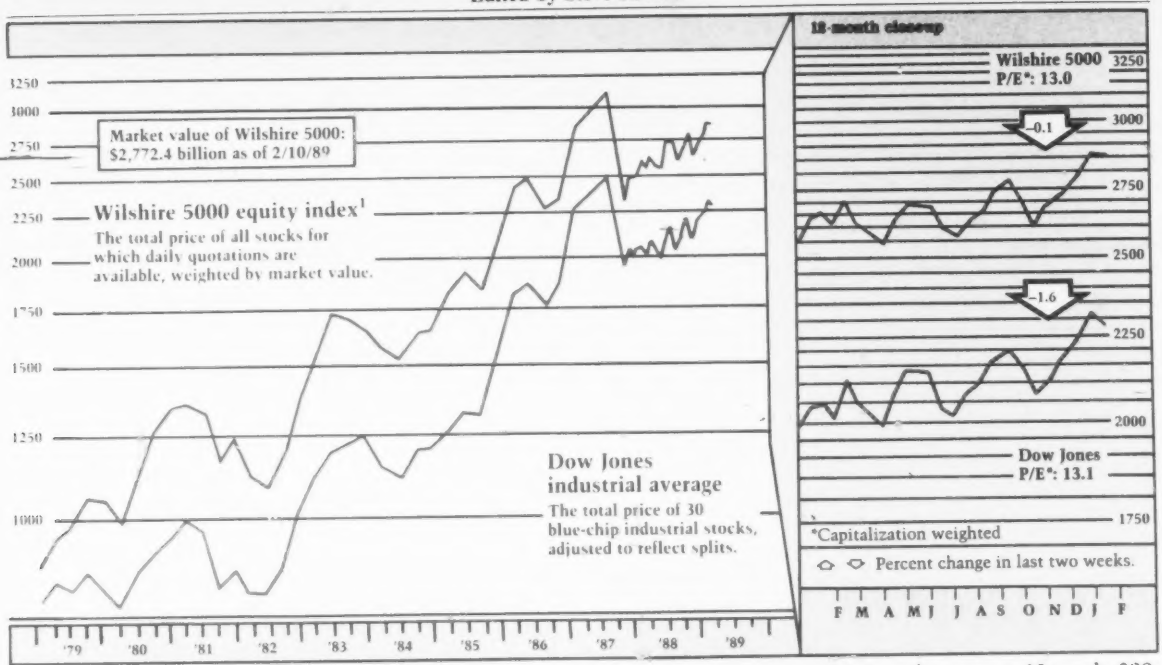
Christie's

Early Ming double gourd moon flask

Most of the major pieces in the Palmer collection achieved remarkably consistent rates of return. For example, a double gourd moon flask brought the top price of the auction at $521,800, compared with the original purchase price of $333 paid in 1934—an annual return in dollars of 14.6%. A "Palace" bowl purchased for $249 in 1936 now sold for $282,051—an annual return of 14.5%. And a Waisted bowl and cover, which had cost $611 in the late 1920s, sold for $310,260—a return of 13.4% per annum.

The Forbes/Wilshire 5000 Review

Edited by Steve Kichen



Believers in the old "odd lot" theory—small investors are usually wrong—have new grist for their mills. The ratio of mutual fund purchases to mutual fund sales suggests that small investors are returning to the market, something that traditionally happens in the later stages of a rally. According to *Investor's Daily*, currently, the mutual fund purchase ratio is at 1.13, meaning that there were $113 of purchases for every $100 of redemptions. That's up from a low of 0.81 last August. Thus, it seems that it was more than the institutions driving the recent 12-week 309-point rally in the Dow.

But, interestingly, with all those small investors jumping into the market, somebody was selling off the blue chips. The Dow closed lower in seven of the last eight sessions and it finished the recent two-week period with a 1.6% decline. The selloff did not extend to the secondary stocks: The o-t-c and the Amex advanced 1.1% and 0.4%, respectively.

Closeup On the Equity Markets

Performance of six leading indexes

Percent change	Wilshire 5000	Forbes 500[2]	Dow Jones industrials	NYSE Composite	Amex Market Value Index	NASDAQ Composite
in last 4 weeks	3.2	2.9	2.7	2.8	2.2	3.9
in last 52 weeks	13.6	13.1	15.3	13.2	16.5	13.9

Stock performance based on six key investor yardsticks[3]

Percent change	Company size		Volatility[4]		P/E multiple		Dividend yield		Growth profile[5]		Share price	
	large	small	high	low	over 21	under 8	over 4.5%	none	high	low	over $34	under $4
in last 4 weeks	3.4	4.6	4.1	1.6	3.4	4.4	1.8	2.8	5.0	2.3	3.2	4.0
in last 52 weeks	15.9	14.6	19.3	6.4	32.3	16.7	2.4	23.6	15.3	12.2	32.3	3.8

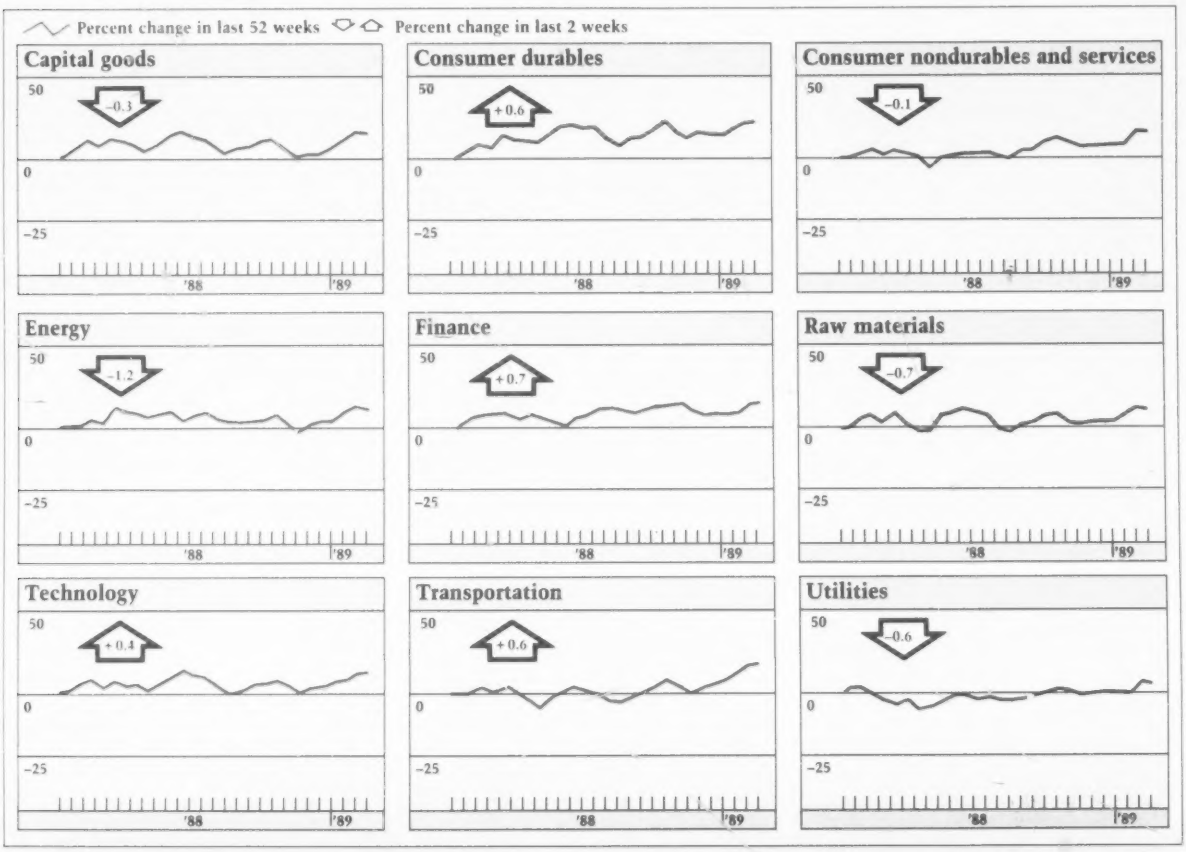
[1]Wilshire index reflects price performance. It differs slightly from market value of outstanding stocks because of retirements of equity since index was created. [2]Based on sales. [3]Equal weighted indices containing all shares with market capitalizations over $10 million. [4]A stock's sensitivity to overall market movement. High-volatility issues have wide price fluctuations, low-volatility issues are more stable. [5]A quantitative evaluation of a stock's growth image, determined by Wilshire Associates.

Note: All data for periods ending 2/10/89. Prepared by Wilshire Associates, Santa Monica, Calif.

Steven Ramos

Where the Action Is

Against the tide. While the overall market, as measured by the Wilshire index, fell 0.1% in the last two weeks, four of the nine Wilshire sectors managed to post gains. The finance group, led by insurance and savings and loan companies, was the strongest sector. Investors responded positively to a proposed federal bailout of the troubled thrift industry. Technology also advanced, led by Commodore International, which gained 16.8%. Commodore, which manufactures both IBM-compatible and noncompatible computers, is a former Wall Street favorite that now appears to be making something of a comeback. Microsoft, Mentor Graphics, General Instrument and Novell all gained more than 10%. Consumer durables and transportation stocks also posted two-week advances.



What the Analysts Think

So where is the recession? Analysts raised 1989 earnings estimates for General Motors and Chrysler. With the automakers in favor again on Wall Street, it's all too likely that analysts raised their estimates to justify the runup in stock prices. The experts are now forecasting 1989 earnings of $13.33 a share for GM and $5.25 for Chrysler.

Forecasting the Forbes Sales 500

Performance period	Average earnings per share	P/E
latest 12 months	$3.35	12.0
1989 estimates	3.95	10.2
1990 estimates	4.53	9.4

Rank based on change in estimate	Sector	Estimated 1989 EPS	Estimated 1989 P/E	% change in 1989 estimate in 2 weeks	% change in 1989 estimate in 4 weeks
1	Consumer durables	$5.06	10.8	2.86%	3.12%
2	Raw materials	3.54	9.2	1.39	1.25
3	Utilities	3.08	10.1	0.08	0.26
4	Energy	3.06	11.9	0.07	0.30
5	Consumer nondurables	2.76	13.0	0.01	-0.09
6	Finance	3.77	7.9	-0.12	-0.31
7	Capital goods	3.03	12.6	-0.38	-0.43
8	Technology	3.21	11.1	-0.49	-0.77
9	Transportation	2.83	10.4	-1.38	-1.42

Earnings projections are capitalization-weighted consensus estimates from over 3,000 security analysts. Data are compiled and updated continually by the Institutional Brokers Estimate System (IBES), a service of Lynch, Jones & Ryan, a New York-based brokerage firm.

Note: All data for periods ending 2/10/89. Prepared by Wilshire Associates, Santa Monica, Calif., IBES, a service of Lynch, Jones & Ryan, New York.